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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/780,621

02/19/2004

Takashi Imai

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10/03/2008

FITZPATRICK CELLA HARPER & SCINTO  
30 ROCKEFELLER PLAZA  
NEW YORK, NY 10112

EXAMINER

HASSAN, AURANGZEB

ART UNIT

PAPER NUMBER

2182

MAIL DATE

DELIVERY MODE

10/03/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/780,621	<b>Applicant(s)</b> IMAI, TAKASHI	
	<b>Examiner</b> AURANGZEB HASSAN	<b>Art Unit</b> 2182	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 06 August 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 18-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 18-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8/6/2008 has been entered.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 18 – 28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 18: line 21 the phrase "the a" in combination of the definition of a connection unit claim 18: lines 9 – 10, renders the claim indefinite. The Examiner notes that upon first observation the phrase "the a" appears to be a minor informality with two possible corrections in the use of "a" or "the", however upon further inspection both interpretations would render the claim indefinite.

Utilizing the first interpretation; the claim would read “a plurality of connected external apparatuses...” This interpretation would be indefinite because an external apparatus can be connected only via a connector and connection unit; however the connection unit necessitates a plurality of connectors connectable only to a single external apparatus, therefore the word **connected** would be best interpreted to represent that there are external apparatuses connected to each other and not connected to the information processing apparatus as claimed. The claim does not enable nor provide support for a plurality of external apparatuses and therefore indefinite.

Utilizing the second interpretation; the claim would read as “the plurality of connected external apparatuses...” This interpretation would raise a lack of antecedent basis problems because there is not positive recitation of a plurality of connected external apparatuses preceding line 15. Furthermore it would also have the indefinite problems from the first interpretation above.

The Examiner will best interpret the limitations in light of the claims and specification to represent a connection unit in which a plurality of external apparatuses are connectable to the information processing apparatus via a plurality of connectors.

The Examiner notes amendments in the claim limitations but in particular the Examiner suggests that the phrase “the a” be amended accordingly as either “the” or “a”. The above explanation reiterates the repercussions of each amendment and the Applicant is recommended to make appropriate changes to remedy the claims to resolve the current and any future 35 U.S.C. 112 2<sup>nd</sup> problems.

Appropriate clarification/correction required.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 18, 19, 23 – 25 and 28 are rejected under 35 U.S.C. 102(e) as being anticipated by Kanai et al (US Publication Number 2004/0153597 hereinafter “Kanai”).

6. As per claim 18 Kanai teaches an information processing apparatus capable of communication with an external unit connected thereto, comprising: a USB device controller connectable with said external unit for controlling communication between said connected external unit and said information processing apparatus (USB function controller 24 connectable to external USB function device 200, figure 3); a USB host controller connectable with said external unit for controlling communication between said connected external unit and said information processing apparatus (USB host controller 23 connectable to external USB host device 100, figure 3); a connection unit having a plurality of connectors for connecting with the external apparatus(es) each of

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which is connectable with any one of a USB host apparatus and a USB device apparatus (transceiver 25, figure 3); a control connected with a plurality of external apparatuses through said USB device controller and said USB host controller; and a switching unit (Switching control register 27C, figure 3) for switching a connection between each of the plurality of connectors and one of said USB device controller and said USB host controller, wherein said switching unit determines the type of the connected external apparatus and if it is determined that a plurality of connected external apparatuses include a USB device apparatus and a USB host apparatus, connects the USB device apparatus with the USB host controller (USB communication of device with host, figure 4, paragraphs [0063 – 0064]) and the USB host apparatus with the USB device controller (USB communication of host with device, figure 4, paragraphs [0063 – 0064]).

The Examiner notes that the claim has been rejected in light of USC 112 rejection above and the best reasonable interpretation therein. Also the information processing apparatus and USB controllers of Kanai are “capable” of communication and “connectable” to a multiplicity of devices and no teachings of Kanai stipulate that the “capable/connectable” steps of the claim limitations cannot be accomplished by the prior art.

7. As per claims 23 and 28, Kanai teaches a method and computer-readable storage medium, for an information processing apparatus capable of communication

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with one or more external apparatuses comprising a USB device controller connectable with said external apparatuses for controlling communication between said connected external apparatuses and the information processing apparatus (USB function controller 24 connectable to external USB function device 200, figure 3), a USB host controller connectable with said external apparatuses for controlling communication between said connected external apparatuses and the information processing apparatus (USB host controller 23 connectable to external USB host device 100, figure 3), a connection unit having a plurality of connectors for connecting with the external apparatus(es) each of which is connectable with any one of a USB host apparatus and a USB device apparatus, and a control connected with a plurality of external apparatuses through the USB device controller and the USB host controller (transceiver 25, figure 3); and a switching unit (Switching control register 27C, figure 3), said method comprising: a switching step for switching a connection between each of the plurality of connectors and one of the USB device controller and the USB host controller for determining the type of the connected external apparatus and if it is determined that a plurality of connected external apparatuses include USB device apparatuses and USB host apparatuses, connects the USB device apparatus with the USB host controller (USB communication of device with host, figure 4, paragraphs [0063 – 0064]) and the USB host apparatus with the USB device controller (USB communication of host with device, figure 4, paragraphs [0063 – 0064]); a device control step for controlling, by means of the USB device controller, communication between the USB host apparatus and the information processing apparatus (USB function controller 24 connectable to external

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USB function device 200, figure 3); a host control step for controlling, by means of the USB host controller, communication between the USB device apparatus and the information processing apparatus (USB host controller 23 connectable to external USB host device 100, figure 3)

8. As per claims 19 and 24, Kanai teaches an apparatus and method wherein the connectors are AB type connectors in conformity with the Universal Serial Bus communication standards, and wherein if a B type connector is connected with said connection unit, it is determined in said determination step that the external unit is the USB host unit (131, figure 9).

9. As per claims 20 and 25, Kanai teaches an apparatus and method wherein the connectors are AB type connectors in conformity with the Universal Serial Bus communication standards, and wherein if an A type connector is connected with the connection unit, it is determined in said determination step that the external unit is the USB device unit (231, figure 9).

### ***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.



11. Claims 21, 22, 26 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kanai in view of Ying et al. (US Publication Number 2003/0172223, hereinafter "Ying").

12. As per claims 21 and 26, Kanai teaches an apparatus and method comprising: an execution status determination step of determining an execution status of said device control step and said host control step (switching determines whether the host device or function device is connected, paragraph [0060]).

Kanai fails to teach a warning step of, if it is determined in said execution status determination step that said device control step or said host control step is in execution, and said control step, selected from said first step and said host control step in correspondence with the type of the external unit determined in said determination step and controlling communication between the external unit and the information processing apparatus, is in execution, giving a warning to an operator of the information processing apparatus, wherein in said selection step, said control step that is in execution is selected as said control step of controlling communication between the external unit and the information processing apparatus.

Ying analogously teaches an apparatus and method comprising: a warning step of (busy, paragraph [0034]), if it is determined at said execution status determination step that said device control step or said host control step is in execution, and said control step, selected from said device step and said host control step in

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correspondence with the type of said external unit determined by said determination step (connected and induced from the data input ends D+ and D-, paragraphs [0030-0032]) and controlling communication between said external unit and said information processing apparatus, is in execution, giving a warning to an operator (displayed as red, yellow and green, paragraph [0040]) of said information processing apparatus, wherein at said selection step, said control unit in execution is selected as said control step of controlling communication between said external unit and said information processing apparatus .

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the system of Kanai with the above teachings of Ying. One of ordinary skill in the art at the time of the applicant's invention would have been motivated to make such modification in order to be able to clearly tell the user the current situation of the host, in a USB switching environment so the user may operate under a friendlier atmosphere (paragraph [0016]).

13. Kanai modified by the teachings of Ying as applied to claim 21 above, as per claims 22 and 27, Ying teaches an apparatus and method wherein if it is determined in said use status determination step that said control step in execution is no longer in execution (red light displayed when sharer is busy and host can not switch, paragraph [0040]), said control step that has been in execution is selected in said selection step as said control step of controlling communication between the external unit and the

information processing apparatus (yellow light displayed when host is not in an online state and no other host is using the USB, paragraph [0040]).

### ***Response to Arguments***

14. Applicant's arguments filed 7/21/2008 have been fully considered but they are not persuasive.

The Applicant argues that Kanai fails to teach or suggest the characteristics that each of the connectors can connect any one of USB host apparatuses and USB device apparatus, and the USB host controller and the USB device controller can be used at the same time.

As per the applicant's arguments, the Examiner respectfully disagrees. The Applicant argues on page 1 of the remarks that the connectors as claimed are connectable with both a USB host or a USB device **but connected to only one of them at a time**. This in turn has an impact on the controllers. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., **simultaneous and "at the same time"** use of the plurality of connectors) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). The claims do not necessitate **simultaneous** use of the connectors in the information processing apparatus. Therefore Applicant's arguments do not comply with 37 CFR 1.111(c) because they do not clearly

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point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited or the objections made. Further, they do not show how the amendments avoid such references or objections.

### ***Conclusion***

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to AURANGZEB HASSAN whose telephone number is (571)272-8625. The examiner can normally be reached on Monday - Friday 9 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on (571)272-6729. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/Tariq Hafiz/  
Supervisory Patent Examiner, Art Unit 2182